

1 **CLAIMS:**

2 1. A fire retarding device for covering a hot casing,
3 comprising:

4 a flexible member adapted for superposition on the hot
5 casing, said member adapted to cover at least a
6 portion of the hot casing, said member comprising
7 intermingled filaments forming a porous flame
8 arresting fibrous network; said fibrous network
9 having a volume being more porous than dense, and
10 wherein said filaments are arranged to define voids
11 of a maximum size throughout said fibrous network,
12 and wherein said maximum void size is chosen to
13 limit flame propagation of an ignited fluid through
14 said member.

15 2. The fire retarding device as defined in claim 1, wherein
16 the fire retarding device is removable from said hot
17 casing.

18 3. The fire retarding device as defined in claim 1, wherein
19 said filaments are irregularly intertwined to form said
20 fibrous network.

21 4. The fire retarding device as defined in claim 1, wherein
22 said member is entirely comprised of said flame
23 arresting fibrous network.

24 5. The fire retarding device as defined in claim 1, further
25 comprising a plurality of insulative thermal blankets

1 disposed adjacent one another around said hot casing,
2 and wherein a said flexible member is disposed between
3 adjacent sections of said insulative thermal blankets.

4 6. The fire retarding device as defined in claim 1, further
5 comprising an insulative thermal blanket disposed around
6 said hot casing, and wherein a said flexible member is
7 disposed around said insulative thermal blanket.

8 7. The fire retarding device as defined in claim 1, wherein
9 said member is disposed immediately adjacent said hot
10 casing.

11 8. The fire retarding device as defined in claim 1, wherein
12 said hot casing is an aircraft engine casing.

13 9. The fire retarding device as defined in claim 1, wherein
14 said filaments are metal.

15 10. A fire retarding device for covering a hot casing,
16 comprising:

17 a blanket said member adapted to cover at least a
18 portion of the hot casing, said blanket comprising a
19 plurality of filaments arranged to form a flame
20 arresting matrix, said filaments intersecting in
21 said matrix to form a plurality of voids in said
22 matrix, said voids being smaller than a maximum size
23 throughout said mesh matrix, said maximum size
24 predetermined being to limit flame propagation of an
25 ignited fluid across said voids.

- 1 11. The fire retarding device as defined in claim 10,
2 wherein said blanket is disposed immediately adjacent
3 said hot casing.
- 4 12. A fire retarding device for covering a hot casing,
5 comprising:
6 a member adapted to cover at least a portion of the hot
7 casing, said member comprising a porous flame
8 arresting matrix having a plurality of substantially
9 interconnected voids defined therein, said voids
10 having a maximum size, said maximum size being
11 predetermined to limit flame propagation of an
12 ignited fluid across said voids.
- 13 13. The fire retarding device as defined in claim 12,
14 wherein said member is disposed immediately adjacent on
15 the hot casing.
- 16 14. The fire retarding device as defined in claim 12,
17 further comprising at least one insulative thermal
18 blanket.
- 19 15. The fire retarding device as defined in claim 12,
20 wherein the hot casing is an aircraft jet engine casing
21 and wherein said flammable fluid is jet fuel.
- 22 16. The fire retarding device as defined in claim 12,
23 wherein said flame arresting matrix has a percent-
24 density of between 10% and 30%.

- 1 17. The fire retarding device as defined in claim 12,
2 wherein said voids do not exceed a maximum size in at
3 least a direction extending substantially outwardly from
4 said hot casing.

 - 5 18. The fire retarding device as defined in claim 12,
6 wherein said member is removable from said hot casing.

 - 7 19. The fire retarding device as defined in claim 12,
8 wherein said member is composed of a metal.